



**U.S. Department of Energy**  
**Office of River Protection**

**P.O. Box 450  
Richland, Washington 99352**

02-OSR-0453

Mr. R. F. Naventi, Project Manager  
Bechtel National, Inc.  
3000 George Washington Way  
Richland, Washington 99352

Dear Mr. Naventi:

CONTRACT NO. DE-AC27-01RV14136 – DELIVERABLE 7.2, QUALITY ASSURANCE  
MANUAL – 24590-WTP-QAM-QA-01-001, REVISION 1

- References:
1. BNI letter from A. R. Veirup to M. K. Barrett, ORP, Same Subject, CCN: 035574, dated July 12, 2002.
  2. ORP letter from R. J. Schepens to R. G. Naventi, BNI, "Office of River Protection (ORP) Questions on the Bechtel National Inc. (BNI) Quality Assurance Manual (QAM)," 02-OSR-0394, dated August 21, 2002.
  3. BNI letter from R. F. Naventi to R. J. Schepens, ORP, "Response to Office of River Protection Questions on the Bechtel National, Inc. Quality Assurance Manual," CCN: 040049, dated September 12, 2002.

The U.S. Department of Energy, Office of River Protection (ORP) reviewed proposed changes to the Bechtel National, Inc. (BNI) Quality Assurance Manual (QAM) submitted in Reference 1. The QAM, Revision 1, was submitted to comply with the 10 Code of Federal Regulations (CFR) 830, Subpart A, Section (b)(3) requirement to annually submit changes for approval.

The proposed changes were primarily editorial corrections of organization titles and responsibilities, and clarification and enhancements based on project experience to date. The ORP reviewers determined these changes did not affect safety or current commitments. The ORP found three changes that required clarification. Three questions covering these items were prepared and sent to BNI by Reference 2. BNI responded to the questions in Reference 3. The BNI responses were acceptable.

Based on the attached Safety Evaluation Report, Revision 1 of the QAM is approved. There is reasonable assurance that the health and safety of the public and the workers, and the environment will not be adversely affected by the changes, and they comply with applicable laws, regulations, and RPP-WTP contractual requirements. As the commitments in the BNI responses to the questions are clear, the noted changes may be incorporated in the next revision of the QAM.

Mr. R. F. Naventi  
02-OSR-0453

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If you have any questions, please contact me, or your staff may call Al Hawkins, Office of Safety Regulation, (509) 372-0805.

Sincerely

OSR:ARH

Roy J. Schepens  
Manager

Attachment

**Safety Evaluation Report (SER)  
of 24590-WTP-QAM-QA-01-001, Revision 1  
Quality Assurance Manual**

## **1.0 INTRODUCTION**

The RPP-WTP authorization basis is the composite of information, provided by Bechtel National, Inc. (the Contractor) in response to radiological, nuclear, and process safety requirements, that is the basis on which the Office of River Protection (ORP) Manager grants permission to perform regulated activities. The authorization basis includes information requested by the Contractor for inclusion in the authorization basis and subsequently accepted by ORP. The authorization basis for the RPP-WTP includes the Quality Assurance Manual (QAM). The QAM contains the Contractor's program for meeting the requirements of 10 Code of Federal Regulations (CFR) 830, Subpart A, "Quality Assurance Requirements." By letter dated July 12, 2002,<sup>1</sup> the Contractor submitted proposed revisions to the QAM. The submittal complies with the 10 CFR 830, Subpart A, Section (b)(3) requirement to annually submit changes for approval. This SER documents the evaluation of the changes proposed by the Contractor.

The evaluation was conducted using the methodology described in the Quality Assurance Planning Handbook.<sup>2</sup> Because the changes were generally not substantive, the reviewers addressed only the continued compliance of modified sections, rather than reassess the compliance of the overall QAM.

## **2.0 BACKGROUND**

The Contractor proposed numerous changes to the QAM in its July 12, 2002, letter. Most of the changes were editorial and reflected:

- New organizational titles and changes in responsibilities, without removal of responsibilities,
- Movement of text to better organize the manual and deletion of redundant text,
- Clarifications and changes based on experience to date not affecting commitments.

Revision 1 also reflects changes previously approved by separate Authorization Basis Change Notice (ABCN).<sup>3</sup> The following section documents the evaluation of the proposed changes.

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<sup>1</sup> BNI letter from A. R. Veirup to M. K. Barrett, ORP, "Deliverable 7.2, Quality Assurance Manual – 24590-WTP-QAM-QA-01-001, Revision 1," CCN: 035574, dated July 12, 2002.

<sup>2</sup> RL/REG-2000-14, Revision 2, "Quality Assurance Program Planning Handbook," July 22, 2002.

<sup>3</sup> ORP letter from R. C. Barr to R. F. Naventi, BNI, "Office of Safety Regulation Approval of Bechtel National, Inc. Authorization Basis Change Notice ABCN-24590-01-007, Revision 0, 24590-WTP-ABCN-ESH-01-022, Revision 0, 24590-WTP-ABCN-ESH-02-007, Revision 0, 24590-WTP-ABCN-ESH-02-008, Revision 0, 24590-WTP-ABCN-ESH-02-009, Revision 0," 02-OSR-0209, dated June 5, 2002

### 3.0 EVALUATION

#### Description of Changes:

The following describe the proposed changes to each Quality Assurance Policy modified by Revision 1. Except where the changes are substantive or a question to clarify the intent of a change was prepared, only the general nature of the changes are described.

1. *Policy Q-01.1, Project Organization* – The Contractor proposed changes in management titles, and minor changes to responsibilities, to reflect its current organization.
2. *Policy Q-02.1, Quality Assurance Program* – The Contractor proposed changes to correctly cite 10 CFR 830, Subpart A and a clarification of the role of the Bechtel Corporate QA Manager. This policy was also changed to according to the previously approved ABCN described in Section 2.0, above.
3. *Policy Q-02.2, Personnel Training and Qualification* – The Contractor’s proposed changes clarified the structure of its training organizations, eliminated reference to qualification requirements covered by a separate policy, and aligned stated responsibilities and authorities with its current organization. The Contractor also proposed to add a limitation that continuing training in “...significant applicable procedure changes, applicable industry operating experience, selected fundamentals...and other training as needed to correct identified performance problems” would be limited to “Operators, Technicians, and Maintenance personnel.” The reviewers questioned why the provisions of training to applicable procedure changes (for example) were limited only to Operators, Technicians, and Maintenance personnel. This question was documented as QAM-REV1-01 and sent to the Contractor.<sup>4</sup>
4. *Policy Q-02.3, Auditor/Lead Auditor Qualification and Certification* – The Contractor modified terminology for consistency with NQA-1<sup>5</sup> and made other changes to reflect its current organization.
5. *Policy Q-02.4, Special Reviews* – The Contractor proposed to relocate text to a more appropriate location in the QAM and modifications to reflect its current organization.
6. *Policy Q- 03.2, Software Quality* – The Contractor proposed to delete redundant text and to make other changes to reflect its current organization.
7. *Policy Q-04.1, Procurement and Document Control* – The Contractor proposed to reorganize text for clarification, to eliminate redundant text, to add new management positions, and to revise management titles to reflect the current organization.

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<sup>4</sup> ORP letter from R. J. Schepens to R. G. Naventi, BNI, “Contract No. DE-AC27-01RV14136 – Office of River Protection Questions on the Bechtel National Inc. Quality Assurance Manual,” 02-OSR-0394, Dated August 21, 2002.

<sup>5</sup> The American Society of Mechanical Engineers (ASME) NQA-1, “Quality Assurance Program Requirements for Nuclear Facilities,” 1989 Edition.

8. *Policy Q-06.1, Document Control* – The Contractor proposed changes to specifically align text with Office of Civilian Radioactive Waste Management requirements,<sup>6</sup> and other minor editorial changes.
9. *Q-07.1, Control of Purchased Items and Services* – The Contractor proposed changes to clarify actual practice, to clarify intent, and to reflect the current organization. The proposed changes included text revisions regarding source verification. The reviewers questioned how the individuals performing source verification were qualified. This question was documented as QAM-REV1-02 and sent to the Contractor.
10. *Q-10.1, Inspection* – The Contractor proposed changes to clarify actual practice, to clarify intent, and to remove redundant language.
11. *Q-16.1, Corrective Action* – The Contractor proposed changes to clarify intent and to reflect actual practice.
12. *Q-17.1, Quality Assurance Records* – The Contractor proposed removal of extensive redundant language, relocation of text, and revisions to reflect the current organization.
13. *Q-18.3, Management Assessment* – The Contractor proposed to remove redundant language and to clarify intent. The reviewers noted the proposed changes included eliminating text requiring deficiencies identified during management assessments are identified and action plans developed. The reviewers questioned how deficiencies identified during management assessments are documented and dispositioned. This question was documented as QAM-REV1-03 and sent to the Contractor.

In addition, the Contractor proposed minor changes to Policies *Q-05.1, Instructions, Procedures, and Drawings*, *Q-08.1, Identification and Control of Items*, *Q-09.1, Control of Special Processes*, *Q-11.1, Test Control*, *Q-12.1, Control of Measuring and Test Equipment* (relocation of text only), *Q-13.1, Handling, Storage, and Shipping*, *Q-15.1, Control of Nonconforming Items*, *Q-18.1, Independent Assessment (Audit)*, and *Q-18.2, Quality Assurance Surveillance*.

Evaluation: (Acceptable)

The proposed changes are acceptable because they do not reduce the level of commitment. The analysis supporting this conclusion is provided, for each change noted above, in the following discussion.

1. *Policy Q-01.1, Project Organization* – the reviewers confirmed the modified text did not reduce the level of commitment. Therefore, the changes were acceptable.
2. *Policy Q-02.1, Quality Assurance Program* – the reviewers confirmed the modified text did not reduce the level of commitment. The reviewers confirmed the changes resulting

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<sup>6</sup> DOE/RW-0333P, Quality Assurance Requirements and Description.

from the previously approved ABCN were correctly incorporated into the QAM text. Therefore, the changes were acceptable.

3. *Policy Q-02.2, Personnel Training and Qualification* – the Contractor responded to question QAM-REV1-01 by stating<sup>7</sup>:

“It was not BNI’s intention to limit continuing training on significant procedure changes to just Operation, Technicians, and Maintenance personnel. Currently project procedure 24590-WTP-GPP-CTRG-002, *Training*, section 3.8, provides direction for training on significant procedure changes. This direction is applicable to all project personnel, and is not limited to just Operation, Technicians, and Maintenance personnel. BNI proposes the following change to the identified text in Policy Q-02.2, Section 2 to resolve the question: ‘Continuing training ~~for Operators, Technicians, and Maintenance personnel~~ will include, ~~at a minimum~~ as applicable, training in significant applicable procedure changes, applicable industry operating experience, ....’

The change above will necessitate a change to Policy Q-02.2, Section 3.3.5. Policy Q-02.2, Section 3.3.5 will be revised as follows:

‘Continuing training ~~for Operators, Technicians, and Maintenance personnel~~ will include, ~~at a minimum~~ as applicable, training in significant applicable procedure changes, applicable industry operating experience, ....’”

The reviewers found, with this change, none of the proposed changes to Policy Q-02.2 represented a reduction in commitment. Therefore, the changes were acceptable.

4. *Policy Q-02.3, Auditor/Lead Auditor Qualification and Certification* - The reviewers confirmed the modified text did not reduce the level of commitment. Therefore, the changes were acceptable.
5. *Policy Q-02.4, Special Reviews* - The reviewers concurred with the proposed text relocation and found the changes were acceptable.
6. *Policy Q-03.2, Software Quality Engineering Manager* – The reviewers confirmed only redundant text was eliminated and the other changes did not reduce the level of commitment. Therefore, the changes were acceptable.
7. *Policy Q-04.1, Procurement and Document Control* – The reviewers analyzed the proposed changes and concurred they clarified the current text and eliminated redundancies. Therefore, the changes were acceptable.

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<sup>7</sup> BNI letter from R. F. Naventi to R. J. Schepens, ORP, “Contract No. DE-AC27-01RV14136 – Response to Office of River Protection Questions on the Bechtel National, Inc. Quality Assurance Manual,” CCN: 040049, dated September 12, 2002.

8. *Policy Q-06.1, Document Control* – The reviewers found the proposed changes correctly align the QAM text with OCRWM requirements. Other proposed changes did not reduce commitments. Therefore, the changes were acceptable.
9. *Q-07.1, Control of Purchased Items and Services* – The reviewers found the proposed changes to clarify actual practice did not reduce commitment. The Contractor responded to question QAM-REV1-02 by stating:

“Section 3.3.2 in Policy Q-07.1 requires that source verification be performed by personnel qualified in accordance with Policy Q-02.2. This was not changed in revision 1 of the QAM.”

This was acceptable to the reviewers.

10. *Q-10.1, Inspection* – The reviewers determined the Contractor’s changes to clarify actual practice, to clarify intent, and to remove redundant language did not decrease commitment, and were therefore acceptable.
11. *Q-16.1, Corrective Action* – The reviewers confirmed the modified text did not reduce the level of commitment. Therefore, the changes were acceptable.
12. *Q-17.1, Quality Assurance Records* – The reviewers confirmed text deletions were redundant and the proposed changes did not represent a reduction in commitment. Therefore, the changes were acceptable.
13. *Q-18.3, Management Assessment* – In response to the reviewers question, the Contractor responded:

“BNI agrees with the OSR discussion. BNI will revise the sentence in Policy Q-18.3, section 2 as follows:

~~Significant issues and Deficiencies as well as opportunities for improvement, are to~~  
~~should~~ be identified and action plans developed and implemented where appropriate.”

The reviewers agreed this response adequately addressed their concern. Other proposed changes did not represent reductions in commitment. Therefore, the changes were acceptable.

The reviewers also considered each of the minor changes proposed to Policies *Q-05.1, Instructions, Procedures, and Drawings*, *Q-08.1, Identification and Control of Items*, *Q-09.1, Control of Special Processes*, *Q-11.1, Test Control*, *Q-12.1, Control of Measuring and Test Equipment* (relocation of text only), *Q-13.1, Handling, Storage, and Shipping*, *Q-15.1, Control of Nonconforming Items*, *Q-18.1, Independent Assessment (Audit)*, and *Q-18.2, Quality Assurance Surveillance*. The reviewers found none of the changes reduced commitment. Therefore, the changes were acceptable.

#### **4.0 CONCLUSION**

Based on evaluation of the proposed changes described above, the proposed changes are acceptable, there is reasonable assurance the health and safety of the public and the workers, and the environment will not be adversely affected by the proposed changes. Furthermore, the proposed changes comply with applicable laws, regulations, and RPP-WTP contractual requirements.